The Afghanistan Engineering Support Program assembled this deliverable. It is an approved, official USAID document. Budget information contained herein is for illustrative purposes. All policy, personal, financial, and procurement sensitive information has been removed. Additional information on the report can be obtained from Firouz Rooyani, Tetra Tech Sr. VP International Operations, (703) 387-2151.



ENGINEERING SUPPORT PROGRAM YEAR 3 WORK PLAN

Draft August 14, 2011 Final November 3, 2011 This publication was produced for review by the United States Agency for International Development. It was prepared by Tetra Tech, Inc.

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November 3, 2011

USAID – Office of Infrastructure, Engineering and Energy (OIEE-AESP) Café Compound U.S. Embassy Great Masood Road, Kabul, Afghanistan

Re: Task Order 01–EDH-I-00-08-00027-00 Year 3 Work Plan

Dear

Tetra Tech is pleased to submit the Final Year 3 Work Plan for the above referenced task order under the Afghanistan Engineering Support Program.

Please feel free to contact me with any questions or comments.

Respectfully,

Chief of Party (OIEE-AESP) Tetra Tech, Inc.

Cc:

PAL29W127-1298-10001/DELIVERABLESIDELIV-02-WORK PLANS/11/103 ANNUAL WORK PLAN YEAR 3/FINAL/11/1/03 AESP YEAR 3 WORK PLAN/12/KX

AFGHANISTAN ENGINEERING SUPPORT PROGRAM YEAR 3 WORK PLAN

Draft August 14, 2011 Final November 3, 2011

DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

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Acronyms and Abbreviations

A-E Architecture and Engineering

AESP Afghanistan Engineering Support Program

A/COTR Alternate Contracting Officer's Technical Representative

ATVI Afghanistan Technical & Vocational Institute

B&M Branding & Marking Plan
BMP Best Management Practice
CMU Concrete Masonry Unit
CO Contracting Officer
COP Chief of Party

COTR Contracting Officer's Technical Representative

CV Curriculum Vitea
DCOP Deputy Chief of Party

GIRoA Government of the Islamic Republic of Afghanistan

GW GardaWorld

IP Implementing Partner
IQC Indefinite Quantity Contract
IT Information Technology

ISAF International Security Assistance Force

JOFOC Justification for Other than Full and Open Competition

LN Local National LOE Level of Effort

LTTA Long Term Technical Assistance
MIS Management Information System

MoF Ministry of Finance

MoFA Ministry of Foreign Affairs
MoPW Ministry of Public Works
MEW Ministry of Energy and Water
MOU Memorandum of Understanding
NGO Non-Governmental Organization

OIEE Office Infrastructure, Engineering and Energy

O&M Operation and Maintenance

OSSD Office of Social Sector Development

PMP Performance Monitoring Plan
PRT Provincial Reconstruction Team

OA Ouality Assurance

RMSI Remote Medical Solutions International

R&R Rest & Recuperation
RRB Regional Rest Break
SMART SMART Engineering Team

SOW Statement of Work

STTA Short Term Technical Assistance

TBD To Be Determined

TO Task Order

USACC US Afghan Consulting and Construction

USAID United States Agency for International Development

USG United States Government

WO Work Order

WO-A Work Order-Administrative WO-LT Work Order-Long Term

1.0 Introduction

1.1 Background

The purpose of the Afghanistan Engineering Support Program (AESP) is to provide quick response resident professional architect and engineering (A-E) technical services in the sectors of transportation, vertical structures, energy, water and sanitation, and water resources to United States Agency for International Development (USAID)/Afghanistan. The activities assigned under this Task Order (TO) will support USAID's objective of fostering sustainable development in developing countries. Tetra Tech is committed to developing local national engineers by mentoring and training them through work orders performed under this program.

This Year 3 Work Plan updates the Final Year 2 Work Plan submitted on October 11th, 2010 and provides an updated overview of program management structure, schedule, work flow, and overall program approach. It also outlines work to be accomplished during the third year of the program, with an overview of short-term level of effort (LOE), work activities, longand medium-term postings with arrival dates. For information on work completed to date, please consult the quarterly reports submitted to USAID on January 26th, 2011, April 19th, 2011 and July 20th, 2011.

1.2 Program Goals

The overall program goals remain unchanged since the Final Year 2 Work Plan submitted on October 11th, 2010. Tetra Tech is committed to capacity building and supporting efforts to strengthen collaborative activities with Afghan organizations and individuals. Tetra Tech will continue to support work orders with current local national engineering staff and hire additional staff as directed from USAID. Activities performed by Tetra Tech under the AESP complement and reinforce the activities and A-E expertise of USAID's Office of Infrastructure, Engineering and Energy (OIEE) staff in the following sectors:

- Energy (generation, transmission, distribution and regulation). These services include, but are not limited to, the assessment, planning, design and construction of multiple power networks from generation to distribution, and regulation, small scale systems, renewable energy systems and hybrid systems. These services also include training local nationals.
- Water Resources/Dams. These services include, but are not limited to, the assessment, planning, design and construction for water resource management, urban and rural water systems, drainage basins and irrigation systems, dams and storage reservoirs, flood control programs, domestic and industrial water supply, and the exploration and development of groundwater resources. These services also include training local nationals.
- Water and Sanitation (urban and rural water supply systems, sanitation facilities, hygiene behavior change, and irrigation). These services include, but are not limited to the assessment, planning, design and construction for water treatment, water conveyance, wastewater collection, and wastewater treatment systems. These services also include training local nationals.

- Transportation (roads, rail and airports). These services include, but are not limited to, the assessment, planning, design and construction of transportation systems, primary and secondary roads, and bridges.
- Vertical Structures (structural assessment and design of schools, clinics, government centers and other buildings, including temporary space). These services include, but are not limited to, the structural assessment, planning, design and construction of education, health, judicial, general government facilities, agriculture, industrial parks and other structures as required.
- Quality Assurance (QA). This activity includes the development of a Quality Assurance Plan and the implementation of those plans during the design and construction of the above described features. These services also include training local nationals in QA.

Under the AESP, Tetra Tech provides A-E and technical support so that the OIEE can continue to provide the Mission with needed engineering expertise in order to further the development of sustainable infrastructure in Afghanistan. Tetra Tech's focus will continue to be providing quality engineering service while using LN engineering staff to perform design services, accomplish field investigations and aid in program operations.

2.0 Program Approach

2.1 Introduction

Tetra Tech's Year 3 program approach remains unchanged since the Final Year 2 Work Plan submitted on October 11th, 2010. Under the AESP, Tetra Tech provides engineering planning, design, and other technical support from a dedicated office in Kabul. Providing engineering technical assistance and collaboration not only ensures competent engineering practice; it also increases the technical expertise of project engineering staff and upgrades the quality of design and construction practices among participating engineering and construction companies in Afghanistan.

The work produced is evaluated within the general performance standards: quality of work/compliance with specifications, cost control/effectiveness, timeliness, and client satisfaction.

The engineers are managed by an expatriate senior engineering lead for each sector and receive additional engineering support through short-term engineering assistance. Tetra Tech anticipates staffing realignment of Afghan engineers to support Year 3 projects. Afghan engineers will continue to be mentored by our senior expatriate, involved in capacity building to further the efforts of the Afghanistan engineering community. Additional program support is provided as summarized below:

- Engineering technical expertise and support from reach back engineers staff provided, as needed through e-mail correspondence, videoconference, technical consultations;
- Engineering design guidance and review provided by USAID OIEE; and
- Collaboration and active working relationships with USAID, government agencies, non-governmental organizations (NGOs), and other stakeholders.
- Hiring local national staff in engineering disciplines to assist in providing engineered infrastructure that meets local needs.
- Ensure that the impact of our work is sustainable and durable in the future.

2.2 Planning Activities

The Tetra Tech team provides quality engineering, technical assistance and guidance in the planning of new OIEE activities requested, including conceptualization, analysis and approval documentation such as:

- Preparation or review of studies, assessments, designs, and specifications for systems and equipment for facilities, statements of work (SOW) for associated services, bill of quantities (BOQ) and cost estimates, requests for proposals (RFP), and bid assistance;
- Preparation or review of training programs, especially in the areas of plant or equipment start-up, operation, maintenance, testing, acceptance, and logistics procedures and efficiency;
- Preparation, review, or assistance in development of statistical data on existing supply/demand and supply/demand forecasts. Development and interpretation for system usage data, forecasting future system requirements and estimating costs;

- Preparation or review of pre-feasibility and feasibility studies; cost estimates; technical, financial and economic surveys; social soundness, management and financial analyses; organizational plans; and recommendations concerning technical and economic aspects of development;
- Ensuring that environmental and sustainability issues are considered in program design and in keeping with Agency practices in accordance with USAID's environmental procedures or "Regulation 216" (Title 22, Code of Federal Regulations, Part 216);
- Analysis of risks associated with natural disasters and the design of structures and services to appropriate building standards to better withstand such disasters; and analysis, evaluation and preparation of plans and procedures for maintenance and operations.
- Preparation of Quality Assurance Plans for designated construction activities using our team of local engineers and expatriate staff.
- Associate project goals to core principles outlined for USAID engagement: (1) increase Afghan ownership and capacity, (2) contributes to stability and confidence, and (3) is effective both programmatically and cost-wise.

2.3 Design Activities

The Tetra Tech team manages, in a timely manner, the preparation of detailed engineering studies, assessments, designs, plans, specifications and cost estimates for assigned OIEE programs and activities, and ensures that they comply with appropriate national and international standards and reflect Agency best practices including:

- Design of complex activities in support of OIEE;
- Provision of limited scope or short-term services involving preparation of preliminary or final drawings, sketches, plans, aerial photographs and other topographical or geological data used to plan and review projects; and
- Analysis and evaluation of designs, drawings, specifications, cost estimates, schedules
 and lists of equipment requirements to inform and make recommendations to USAID
 regarding assistance commitments for activities.
- Preparation of specific Quality Assurance Plans.

2.4 Technical Support and Consulting Services to USAID

The Tetra Tech team provides project management advisory services for contracts and agreements with other Implementing Partners' infrastructure. Tetra Tech provides engineering management support to USAID under this contract and provides engineering guidance to contractors and grantees in accordance with the terms of the contract including:

- Provide technical advice and support to personnel working on USAID programs that are related to infrastructure, such as provincial reconstruction team (PRT) personnel;
- Provide technical advice to industrial and managerial personnel regarding design, and/or program modifications and structural repairs;

- Provide expert technical oversight to implementer staff, keeping OIEE, PRT, Office
 of Social Sector Development (OSSD) and the contracting officer (CO) informed of
 work progress;
- Provide technical support for procurement processes, including evaluation of IP's request for bids, proposals, quotes and contract modifications;
- Prepare or review reports and recommendations regarding the general arrangements, viability and cost effectiveness of capital plans and processes as to validity and economy of work plans, and for changes, additions, or revisions in project activities;
- Monitor adequacy and acceptability of delivered goods and services under approved activities including equipment installation, training activities through field inspections, reviewing contractor reports, and meeting project personnel and implementer representatives;
- Develop solutions to complex project and program A-E issues unresolved by implementers;
- Provide construction inspection and surveillance services in accordance with the approved Quality Assurance Plans;
- Provide value engineering services;
- Provide technical assistance to the COTR in responding to proposed changes in OIEE's Contracts, SOWs, the validity of claims, and the reasonableness of contract time extensions;
- Provide appropriate technical assistance to the COTR in issuance and negotiations of change orders in accordance with procedures;
- Perform administrative responsibilities including, but not limited to, activities such as
 drafting project implementation letters, preparing action memorandum and reports,
 estimating expenditures, reviewing payment vouchers, responding to audits, assessing
 claims, writing Justification for Other than Full and Open Competition (JOFOC) and
 performing other related activities; and
- Provide quality assurance services, as required.

2.5 Quality Assurance Services

Tetra Tech monitors the construction projects implemented by other contractors and grantees through site visits by qualified engineers. Monitoring includes visual inspection of work at the site as well as inspection of the implementing partners' (IPs') testing facilities, procedures and results. The engineering monitors check the IPs' work to ensure compliance with the approved Quality Control (QC) Plan, Quality Assurance (QA) Plan, and pre-determined technical standards and construction schedules.

QA tasks include but are not limited to the following:

- Regular Inspections: The QA monitor conducts on-site inspections of projects. During the inspections, QA monitor:
 - Verifies and ensures that the quality of materials used meet contract specifications;

- Verifies the correctness of the quantities used;
- Monitors sampling and testing procedures, including testing frequency, and reports failed tests to concerned parties for corrective action;
- Verifies the quality of construction/installation work and ensure conformity to contract design plans, specifications and requirements;
- Monitors progress of work against the approved construction schedule, report deviations and their causes, and recommend corrective actions;
- Reports on the safety conditions on project sites, contractor's facilities, and identify violations of safety regulations;
- o Monitors safety violations and follow-up on corrective actions; and
- O Verifies security incident reports, weather problems and any other events that could affect construction schedule in a timely manner.
- Substantial Completion ^[1] Inspection: Upon substantial completion of construction/rehabilitation activities, the QA monitor with representatives from USAID and the relevant Ministry shall inspect the project and develop a punch list of items requiring remedial work before final inspection and acceptance.
- Punch List Verification Inspection. When the IP informs the QA monitor that the
 punch list activities are completed, the QA monitor, together with representatives
 from USAID and the relevant Ministry will conduct an Inspection and Verification of
 Punch List activities. During the inspection, parties will either determine if the punch
 list items have been corrected or require additional work.
- Final Inspection and Acceptance: After completion of punch list activities, the Contractor together with USAID and the relevant Ministry representative will conduct Final Inspection of Project activities including the punch list. If parties are satisfied that the punch list items have been completed, USAID and the GIROA sign the handover certificate.
- Final Warranty Inspection: When there is a warranty period, the QA monitor, together with USAID and the relevant Ministry will conduct a Final Warranty Inspection of the Project. Following this inspection, responsibility will then be transferred to the relevant Ministry.

2.6 Capacity Building

USAID has a commitment to capacity development of Afghan organizations and individuals through their participation in USAID awards. To that end, Tetra Tech has included Afghan program staff, Afghan engineering staff, and Afghan organizations as subcontractors, as applicable. The expatriate staff works closely with the Afghan staff to develop their skills including project management, project work flow, AutoCAD, construction, contracts, and technical writing.

Tetra Tech is using SMART engineering, a local Afghan engineering firm and USACC, an Afghan multi-disciplined engineering and construction services firm, to provide staff to work in the Tetra Tech office as dedicated staff, but as a sub-contractor. This allows the local

engineering firm's employees to gain valuable experience and to share experiences with the Tetra Tech expatriate staff.

Tetra Tech identified additional capacity building activities to be implemented as work orders. These include activities such as internships for university students, field trips to local construction sites to provide real world examples of engineering projects, and a professional society program. Section 5.5 provides more discussion on ongoing and proposed capacity building activities.

2.7 Collaboration/Coordination with Appropriate Stakeholders

The Tetra Tech team collaborates and coordinates with appropriate stakeholders when directed by the COTR. Appropriate stakeholders include International Security Assistance Force (ISAF), U.S Military, key Afghan ministries (e.g. Ministry of Finance (MoF), Ministry of Foreign Affairs (MoFA), Ministry of Public Works (MoPW), Ministry of Transport and Civil Aviation (MoTCA), and Ministry of Energy and Water (MEW)), provincial officials, donors, NGOs, communities, and others as identified by requirements of the work.

3.0 Program Staffing

3.1 Overview and Management

Since the submittal of the Final Year 2 Work Plan on October 11th, 2010, USAID has increased the scope of this program substantially, requiring a greater LOE in the initial years of the program. Three modifications (MOD 5, MOD 6 and MOD 8) addressed additional staffing requested by USAID, and revised the labor categories and LOE of the Task Order. As a result of these modifications, Tetra Tech expanded our in-country and home office team of resources, with a particular focus on adding staff members in electrical, mechanical, transportation, and structural disciplines.

Figure 3-1 presents an updated organization chart that shows the key personnel and Afghan mid- and junior-level staff assigned to the AESP and authorized by USAID in MOD 8. Long-term and short-term technical assistance (LTTA and STTA) and reach back support personnel supplement the work effort as necessary. The organization chart graphically indicates staffing support and assignments (Figure 3-1).

It can be anticipated that expatriate and LN technical staff will be realigned as the scope and nature of the work orders evolve.

3.2 In Country A-E Staff

3.2.1 Expatriate

Our in-country team is led by the Chief of Party (COP) who has full authority to execute the program and respond to the needs of OIEE.

The OIEE AESP Program added nine expatriate staff positions in Year 2 to bring the program total to 19 to strengthen discipline specific capabilities for expanding work order support and quality control. Positions added through contract modifications are clearly identified on the Expatriate Staff Plan (Table 3-1).

In support of USAID's engagement in Afghanistan, the AESP work plan calls for the Deputy Chief of Party (DCOP) position to be filled by an Afghan citizen. During Year 3, an aggressive timeline to transition from an expatriate DCOP to an Afghan DCOP will be engaged. Suitable candidates with the requisite skills and experience have been identified. During the first quarter of Year 3, identified candidates will continue to be evaluated as additional responsibilities are assigned. During Quarter 2 and 3, the selected candidate will be promoted to DCOP and a sustainable transition plan will be initiated. The expatriate DCOP will provide ongoing mentoring for the Afghan DCOP until responsibilities are completely transferred. The AESP program will continue its' commitment of preparing engineering professionals of all levels in support of USAID's campaign of increasing Afghan ownership capacities.

As shown on Table 3-1, there are leads for each of the five sectors – energy, water resources, water/sanitation, vertical structures, and transportation. As requests were received from the USAID COTR and A/COTR, support staff members in the Civil/Structural, Electrical, and Mechanical/HVAC disciplines were substituted or replaced to meet work order deadlines. The Technical Support Manager position assists in the overall work order coordination and

implementation. The Administration Manager position oversees and manages the Afghan administrative and support staff. These positions were added as part of MOD 6 and MOD 8. The organization chart shows several expatriate staff positions that were included in the initial contract. Initially, two junior level engineering staff, that work closely with the Afghan engineering staff were included. Manager of Information Systems/Technical Writer, (MIS Manager), who prepares the status reports and deliverables associated with applicable work orders was included. In addition, a Contracts/Procurement Manager and a Finance Manager provide administrative oversight and support the daily functions in Kabul.

Table 3-1 Anticipated Expatriate Staff Plan AESP/OIEE (Draft Plan)

Position	Workdays Ordered
Chief of Party	
Deputy Chief of Party	
Vertical Structures Lead	
Energy Lead	
Water/Sanitation Lead	
Water Resources Lead	
Field Service Manager	
Contracts Manager	
MIS Manager/Tech Writer	
Finance Manager	
Civil Engineer	
Civil Engineer	
Transportation Lead	
VS Electrical Lead	
Senior Energy Specialist	
VS Civil/Struct Lead	
Senior Project Manager	
Tech Support Manager	
Administration Manager	
PRT Manager	
Communications Specialist	
Sr QA Inspector	
STTA – IT Start Up	
STTA – IT Support	
STTA – Water/WW Eng	
STTA - Survey Support	
STTA - Geologist	
STTA – TBN Civil - Sr	
STTA – TBN Civil - Mid	
STTA – TBN Civil – Jr	
Various – Home Office Reachback	
Total Workdays Ordered	

3.2.2 Local National Staff

In support of Tetra Tech's capacity building program, 31 LN positions (both full time and part time) were included in the initial work plan. These include junior architects and engineers, administrative, finance and IT personnel, and several facilities support staff.

During the first year, the OIEE AESP added 39 LN staff members, through Contract MODs, in the areas of administration, accounting and civil engineering to strengthen the team's capabilities, particularly in the transportation sector. MOD 8 expanded that program significantly to 70 LN positions to accommodate the authorized work orders for the SPR QA Program and the PRT Support Program during Year 2. During Year 3, it is anticipated that project focus will be concentrated within the Energy sector. A re-alignment of LN staff members will be done to meet current and future work orders requirements.

In addition to providing capacity development through hiring full-time staff through direct subcontracts, an important component of the AESP is partnering with Afghan firms both to develop much-needed local capacity and to better address local challenges. To that end, the Tetra Tech team partnered with SMART Engineering Team (SMART) and US Afghan Consulting and Constructing (USACC) at the outset of the AESP program. In Year 3 of the AESP, Tetra Tech will continue to work with these firms. Surveying services are also being utilized on vertical structures projects on several projects. Several Afghan geotechnical firms are being utilized for geotechnical services on vertical structures and energy projects.

SMART is an Afghanistan-based civil, mechanical, and electrical engineering firm headquartered in Kabul with an additional six regional field offices. SMART will continue to provide a source of qualified local Afghan engineers to AESP.

USACC, an Afghan multi-disciplined engineering and construction services firm, brings a combination of professional consulting expertise in housing design and construction, transport and hydropower development, and water resource management to the project. The company's prime objective is to provide engineering and construction opportunities for local Afghan engineers in Afghanistan. USACC will continue to provide a source of qualified local Afghan engineers and support staff to AESP.

Additionally, Kabul University Faculty of Engineering has agreed to partner with Tetra Tech to provide mentoring and internship opportunities for students and graduates as well as the potential for using faculty members on special projects and issues. This partnership will enhance our Team's ability to ensure that local construction methods and cultural issues are fully addressed. A memorandum of understanding was included in the Tetra Tech response to USAID's RFP.

Tetra Tech has also made contact with Kabul Polytechnic to request a partnership under the AESP within the same guidelines as Kabul University.

Tetra Tech is also committed to using the Afghanistan Technical & Vocational Institute (ATVI) to provide a source of technical staff to assist with building the capacity of the local Afghan supply chain and vendor community by providing training and opportunities for Afghans to use their new skills. A memorandum of understanding with ATVI was also included in Tetra Tech's RFP response.

3.3 In Country Support Services

In country support services consist of security, contracts and procurement, information technology (IT), and administration. There have been no substantial changes since the outset of the AESP program. The following identifies in-country support services provided under the AESP.

- To ensure that our staff can safely complete work throughout the country, security for Tetra Tech is provided by GardaWorld (GW) as described in the Operational Security Plan, Version 3, May 2011. The Operational Security Plan will be reviewed again in October of 2011. The current contract will remain in force until March of 2012. It is anticipated that Afghan Public Protection Force will take over security services in March 2012. Currently, we are unable to anticipate changes but will continue to assess and review during Year 3.
- Contracts and procurement staff support the AESP program with the following activities:
 - o provide guidance to contractors/grantees as requested by OIEE;
 - o provide support for procurement processes, including evaluation of contracts, and contract modifications;
 - o provide assistance to the COTR in issuance and negotiating of change orders; and
 - o writing JOFOC.
- Tetra Tech IT staff provide appropriate technology solutions as required supporting ongoing operations. The staff consists of two Afghan IT specialists, who bring a wide array of systems engineering, technical support, and network operations skills to the table. They were recruited in part for their familiarity with sound industry-standard procedures and will receive ongoing training throughout the project.
- Administrative staff assists the A-E staff with document production, travel coordination and other administrative tasks.

3.4 Home Office

3.4.1 Technical Support

Home office technical reach back provides a cost-effective means of accessing essential and unique engineering expertise (such as geology, seismology, environmental and structural engineering) needed for accurate and high quality project designs. Tetra Tech's home office resource base consists of over 12,000 architects, engineers, and other technical support professionals spanning 50 technical and management disciplines. The home office technical support manager will continue to provide day-to-day support to the COP on requirements for technical home office support and STTA staffing needs. To date, more than 330 people have been approved and are available to provide reach back support as needed on the AESP.

3.4.2 STTA Staff Coordination

Technical specialists from the US are utilized as in-country STTA support staff for short term (2 to 6 weeks or longer) assignments to augment the in-country team as required. The STTA support staff approach provides the ability to respond to specific needs and to focus on complex technical issues and staff surge requirements. Geotechnical and survey STTA staff rotate into the program at various times to provide support on the vertical structures and energy work orders. Tetra Tech's airport planning specialist provided services for the Limited Airport Master Plans (LAMPs) program through a STTA arrangement.

3.4.3 Administration and Personnel Support

Overall project administration and personnel support is provided by the home office. This includes human resources for expatriate staff, deployment support, and financial management. LN personnel administration and support is provided by the Tetra Tech office in Kabul. The COP provides day-to-day project administration.

3.5 Assignment Staffing

Depending on the type of work, reach back support, STTA staff, or special local consultants may be required. Tables 3-2 to 3-6 present the anticipated source of staffing for the various types of activities described in Sections 2.2 to 2.7. To the extent practical, Year 3 will allow for work to be completed by in-country expatriate and LN staff.

USAID/OIEE ENGINE	ERING SUPPORT PROGRA	M (ESP)													
Afghanistan															
Organization Chart				la Oa			L - (()							II OCC C	
				In-Co	untry Manag	gement and S	tatting							Home Office Su	pport
	Expat Position - Base Contract														
	Local Afghan Position - Base Cont	ract													
	Expat Position - MOD 06/08					USAID									
						OIEE									
	Local Afghan Position - MOD 06/08														
	Position Title Change				Govmt Liaison	COP								A-E IQC Design Mgr	A-E IQC Program Mgmt
	rosition ritle onlinge														
Security Manager					LN Deputy COP	Deputy COP								Tech Spt Mgr	
Dep Security Mgr	Contracts/Proc Mgr Administra	tion Mgr Finance Manager	Communications Spec	Vertical Structures	Energy	Water/Sanitation	Transportation	Project Manager	Sr Energy Spec	Sr QA Inspector	Field Svs Mgr	Tech Support Mgr	Technical Su		Final Design Support
													Architectu Civil	Sr. Architect	Facility Designs
LN Guards	Admin/HR Mgr Facility M	anager Accountant	MIS Mgr/Tech Writer							QA Monitor	Sr Geotech Eng		Structura Seismic	Sr. Structural Enginee	
53													Geotechni Mechanical - Plumbin	HVAC Sr. Electrical Engineer	r 🔛
	Senior Admin Assistant Cook	(2) Auditor	Sr. Writer/Editor							QA Monitor		Elec Eng	Electrica CADD/Drai	Power Trans Specialis	
													Document C Water Spec	ontrol Construction Manage ialist Sr. QA Specialist	Design Reviews
													Wastewater S _I Alternative E	nergy Training Specialist	
	Admin Assistant/Travel Kitchen He	lpers (3)	IT Manager							QA Monitor	Eng Junior	Civil Eng - Junior	Project Ad Tech/Admin S	upport Sr. Accountant/Audito	
													Contracts Mana Hydrolog	st Transportation Lead	
	Procurement Spec Cleane	rs (2)	IT Assistant							QA Monitor	Civil Eng - Mid	Architect - Sr	Energy Spec Training Spe Estimato	cialist Foundation Engineer	· <mark>=</mark>
													Statisticia Deployment/R	n	
	Buyer Cleane	rs (2)					Staff Make-up			QA Monitor	Civil Eng - Jr	Eng - Mid	Transportatio Dam Engir	n Eng.	
	- Sayor Stours	<u> </u>			Baseline	MOD 06	MOD 08	USAID Letter	USAID Letter		OWN Elig G	Lig Mid	Jan Engi		
					11/9/2009	6/10/2010	8/3/2010	2/22/2011	8/8/2011						
	Laundi			Expats (LTTA)	10	15	19	19	19	QA Monitor	Structural Eng - Jr	Electrical Eng - Mid			
				Security Managers	2	2	2	2	2	_					
				LN's - Kabul Tech	9	9	13	13	10	USACC					
	Maint Te			LN's - Kabul Support	20	20	20	24	27		Sr. Cost Estimator	Electrical Eng - Jr			
				LN's Field Staff	0	0	38	38	6						
				LN's Security	53	53	53	53	53						
				(Estimated)								Electrical Eng - Mid			
					94	99	145 (SPR & PRT)	149	117						
							(SPR & PRT)								
						ical and Suppo	ort Staff								
					Resour	ce Pool of 12,0	00+ Staff								
			Tetra Tech	POWER Eng	USACC	SMART Enginee	ring Team	Kabul Univ	ATVI	Garda World					

Energy Sector Assignment Staffing Table 3-2

Table 3-2	=	Assignment Stanning					
Activity	Activity Type	Sub-Activity	In-Country Staff	Tetra Tech Reach Back	Specialty Consultant Reach Back	STTA Technical Assistance	Special Local Consultant
A. Planning	g Activities						
	Electrical Generation Master Planning			Х	х		
	Load Studies			Х	Х		
B. Design /	1						
	Support Vertical Structure	1					
		MEP Design Review	Х	Х			
		HVAC	Х	Х			
		Plumbing	Х	Х			
		Fire Protection	Х	Х			
		Fuel and Gas Piping	Х	Х			
		Site Electrical	Х	Х			
		Power Distribution	Х	Х			
		Standby Power Systems	Х	Х			
		Solar Photovoltaic Systems	Х	Х			
		Interior Lighting	Х	Х			
		Site Lighting	Х				
		Internal Building Telecommunications	х	х			
	Power Distribution						
		Medium Voltage Public Distribution			х	х	х
		Secondary Substations			Х	Х	Х
	Generation and Transmis	sion					
		High Voltage Transmission Lines			Х		
		Primary Substations			Х		
		Power Generation (Power Plants), Oil & Gas			Х		
		Generation (Power Plants), Micro- Hydro, Wind & Solar			Х	Х	Х
		Utility Management Practices, Tariff Analysis, Regulation		Х	Х		
		Economic Growth Analysis		Х	Χ		
	Roadways						
		Roadway Lighting	Х				
	Communication Infrastruc	eture					
		Site Outside Plant		Х			
		Local Communications Switch Facility		Х		Х	

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Activity	Activity Type	Sub-Activity	In-Country Staff	Tetra Tech Reach Back	Specialty Consultant Reach Back	STTA Technical Assistance	Special Local Consultant
		Communications Public Distribution		Х		Х	
C. Technic	al Support Oversight						
	General Technical Suppo	ort in Energy	х	Х			
D. Capacit	y Building						
	Development of Afghan I Professionals	nergy Organizations and	х				
	Attend Professional Conf	erences	Х				
	Participate in Professiona	al Societies	х	_		_	
E. Collabo	ration/Coordination with Ap	propriate Stakeholders					
	General Tetra Tech Colla Appropriate Stakeholders	aboration/Coordination with	х			-	
	Attend Implementing Par	tner Meetings	Х				
	Attend Inter-Ministerial C	ommittee Meetings	Х				

Table 3-3 Vertical Structures Sector Assignment Staffing

Activity ^a Activity Type Sub-Activity A. Planning Activities Vertical Structures Master Planning	Special Local Consultant
Vertical Structures Moster Planning	
Vertical Structures Master Flamming	
Site Utilization Studies x x	
Site Master Planning x x	
Land Use Study Agency Board Processing x x	
Site Selection Studies x x	
B. Design Activities	
Pre-Design Service	
Project Programming x x	
Project Development Scheduling x x	
Agency Consulting and Review x	
Existing Facility Survey and Evaluation x	
Facility Planning Study x	
Feasibility Study x x	
Architectural Design	
Architectural Programming x x	
Conceptual Design/Schematic Design x x	
Design Development x x	
Construction Documents x x	
Construction Specification x x	
Construction Cost Estimating x x	
Landscape Design Coordination x x	
Civil Engineering Design Coordination x x	
Engineering Design Coordination x x	
Code Compliance Study x x	
Control and Phasing x x	
Building Engineering Design ^b	
Building Structural Design x	
Building Seismic Design x	
Building HVAC x	
Electrical x x	
Plumbing x	
Fire Protection Design x	

Activity ^a	Activity Type	Sub-Activity	In-Country Staff	Tetra Tech Reach Back	STTA Technical Assistance	Special Local Consultant
	Civil Engineering Design ^c					
		Sites up to 2-Acres	Х	Х		
	Bidding and Negotiation					
		Bidding Documents	Х	Х		
		Bidding Negotiation	Х			
		Bid Evaluation	Х			
		Construction Cost Assistance	Х			
	Construction Administration	on				
		Construction Observation	х			
		Field Reports	X			
		Shop Drawings Review and Approval	Х	Х		
		Change Order Monitoring and Processing	X			
		Application for Payment Review and Approval	х			
	Post-Construction Service					
		Start up Assistance			Х	
		Record Drawings	Х			
		Warranty Review	Х			
	Miscellaneous Services	,				
		Graphic Design	1	Х		
		Rendering	1	X		
		3D Modeling and Presentation	х	X		
		Presentations	†	X		
		Color, Signing System and Graphics		X		
		Model Making	х			
C. Technica	al Support Oversight	3	†			
	General Technical Suppor	rt in Architecture	х	Х		
D. Capacity			1		<u> </u>	
1		rchitectural Organizations and Professionals	Х		<u> </u>	
E. Collabor	ation/Coordination with Appr	-	1		<u> </u>	
		poration/Coordination with Appropriate	х			

a. Includes vertical structures and vertical structure support activities
b. Depending on the size and complexity of the project, Tetra Tech reach back assistance may be needed in providing some of the Engineering Services
c. Sites larger than 2 acres will be assigned to Local Staff, but Tetra Tech reach back assistance may

be needed.

Table 3-4 Water and Sanitation Sector Assignment Staffing

Table 3-4	Water and	d Sanitation Sector Assignment Staffing				
Activity	Activity Type	Sub-Activity	In-Country Staff	Tetra Tech Reach Back	STTA Technical Assistance	Special Local Consultant
A. Planning	Activities					
	Water and Sanitation	n Master Planning				
		Water demand and wastewater generation estimates	х			
		Identification and yield analysis of water supplies		Х		
		Raw water quality	Х			
		Potable water standards		х		
		Wastewater treatment standards	х			
		Service area delineation	Х			
B. Design A	activities					
	Water Treatment	Pre-treatment		Х		
		Treatment		Х		
		Disinfection		Х		
		Storage		Х		
		Instrumentation and controls		Х	Х	
		Plant start-up			Х	
		O&M services			Х	Х
	Water Transmission	& Distribution				
		Transmission mains	х	Х		
		Distribution mains	х	Х		
		Hydraulic modeling	х	Х		
		Pump Stations	х	Х		
	Wastewater Collection	on				
		Gravity Sewers	Х	Х		
		Force Mains	Х	Х		
		Pump Stations	х	Х		
		Collection system modeling			Х	
	Wastewater Treatme	ent				
		Wastewater characterization		х	İ	
		Flow monitoring	х	Х		
		Pre-treatment	х	х		
		Secondary treatment	х	х		
		Tertiary treatment		х	İ	
		Disinfection	х	Х		

Activity	Activity Type	Sub-Activity	In-Country Staff	Tetra Tech Reach Back	STTA Technical Assistance	Special Local Consultant
		Solids handling	Х	Х		
		Instrumentation and controls	Х	Х	Х	
	Wastewater Operation	on				
		Plant start-up			Х	Х
		Training			Х	Х
		O&M Services			Х	
	Construction Suppor	t				
		Construction Administration	х			Х
		Field Inspection	х	Х		Х
		RFIs	х	Х		
		Design Certifications	Х		Х	
		Record Drawings (As-Builts)	х	Х		
C. Technica	l Support Oversight					
	General Technical S	upport in Water and Sanitation	х			
D. Capacity	Building					
	Development in Afgh Professionals	nan Water and Sanitation Organizations and	х			
E. Collabora		Appropriate Stakeholders				
	General Tetra Tech (Stakeholders	Collaboration/Coordination with Appropriate	х			

Table 3-5 Transportation Staffing Assignment Sector

Table 3-5	Transportation Sta	ffing Assignment Sector				
Activity	Activity Type	Sub-Activity	In-Country Staff	Tetra Tech Reach Back	STTA Technical Assistance	Special Local Consultant
A. Planning	Activities					
	Transportation Master Plannin	9				
		Traffic Studies		Х		
		Road/Interstate Analysis		Х		
		Aviation Facilities Analysis		Х		
		Railroad Analysis		Х		
		Pedestrian Traffic Analysis		Х		
		Multi-Modal Transit Analysis		Х		
B. Design A	ctivities					
	Road/Inter-province Analysis					
		Inter-province Design		Х		
		Local Roadway Design	Х			
		Intersection & Widening Improvements	Х			
		Site Ingress/Egress Design	Х			
		Site Circulation Design		Х		
		Reconstruction and Improvements	Х			
		Roundabout Design		Х		
		Signal/Signage & Striping Design		Х		
	Traffic Studies					
		Demand Forecasting Modeling		Х		
		Site Circulation & Access Studies		Х		
		Congestion Management Studies		Х		
		Downtown/Urban Studies		Х		
	Aviation Facilities					
		Public		Х		
		Military		х		
	Railroad Analysis			İ	İ	
		Road Crossing/Intersection Design		х		
		Rehabilitation Design - Track/Bridges/Terminals			х	
		Signal Design			Х	
		Terminals			Х	
	Pedestrian Traffic Analysis					
		Traffic Flow Analysis		Х		
		Site Circulation Design		Х		

Activity	Activity Type	Sub-Activity	In-Country Staff	Tetra Tech Reach Back	STTA Technical Assistance	Special Local Consultant
	Design for Construction	T (" 0				
		Traffic Control Plans	Х			
		Site Inspections	Х			
	Intelligence Systems					
		Operation/Safety & Efficiency Designs			Х	
	Pavement Management	0 10 111				
		Survey of Conditions	Х			Х
		Life Cycle Cost Analysis		Х		
		Alternative Strategies & Costs		Х		
	Capital Improvement Plans					
		Development of budgets & Prioritization	Х			
		Program Implementation & Management	Х			
C. Technical Support Oversight						
	General Technical Support in Transportation		х			
D. Capacity	Building					
Development in Transpiration Organizations and Professionals			Х			
E. Collaboration/Coordination with Appropriate Stakeholders						
General Tetra Tech Collaboration/Coordination with Appropriate Stakeholders			Х			

Table 3-6 Water Resources and Dams Sector Assignment Staffing

Table 3-6	Water Resource	es and Dams Sector Assignment Staffing				
Activity	Activity Type	Sub-Activity	In-Country Staff	Tetra Tech Reach Back	STTA Technical Assistance	Special Local Consultant
A. Planning						
	Water Resources Master P					
		Water Quality Assessments	Х			
		Floodway Studies	Х	Х		
		Sediment Transport	Х			
		Water Storage/Dam Studies	Х	Х		
		Stormwater Management/Master Drainage Studies	Х			
		Source Water Protection	Х	Х		
		Designated Uses and Water Quality Standards	Х	х		
		Disaster Prevention and Contingency Planning	х	х		
		Agricultural Runoff Assessments	Х	Х		
		Erosion Control Planning	Х	Х		
		Ground and Surface Water Hydrology	Х	Х		
		Wetlands Delineation	Х	Х		
B. Design A	ctivities					
	Stormwater Management					
		Erosion Control Design/Best Management Practices (BMPs)	х			
		Agricultural Runoff Control	Х			
		Flood Control	Х	Х		
		Infiltration Controls	Х			
	River and Stream Restorati	on				
		Stream Channel Restoration	х			
		Habitat and Ecosystem Restoration			Х	Х
		Flow Control Structures	Х	Х		
	Water Storage Dam Design	1				
		Water Storage Volume	Х	Х		
		Watershed Area	Х	Х		
		Sediment Volume	Х	Х		
		Structure Design	Х	Х		Х
		Spillway Design	Х	Х		
		Risk Assessment	Х	Х		
		Existing Dam Stabilization	Х	Х	Х	

Activity	Activity Type	Sub-Activity	In-Country Staff	Tetra Tech Reach Back	STTA Technical Assistance	Special Local Consultant
	Wetlands					
		Engineered Wetlands Design	Х	Х		
C. Technical Support Oversight						
	General Technical Support in Water Resources		Х	Х		
D. Capacity Building						
	Development in Water Resources Organizations and Professionals		Х			
E. Collaboration/Coordination with Appropriate Stakeholders						
	General Tetra Tech Collaboration/Coordination with Appropriate Stakeholders					

4.0 Deployment

Figure 3-1 presents an updated AESP organization chart. During this third contract year, the only anticipated deployment will be the rotation of the 19 approved expatriate positions. Depending on the type of work, reach back support, STTA staff, or special local consultants may also be required.

5.0 Work Orders

5.1 Overview

Work Order (WO) procedures remain unchanged since the Year 2 Work Plan submittal on March 14th, 2010. Tetra Tech's point of contact with USAID is the project COTR (or alternate contracting officer's technical representative (A/COTR) when the COTR is unavailable). Likewise, USAID's point of contact with Tetra Tech is the project COP, or the DCOP, when the COP is unavailable. To ensure smooth and strategic implementation of the project, it is critical that USAID and Tetra Tech always have and share the same information and decision making processes. To achieve this, our communication channels are open but limited to this single point of contact for work order initiation and approval. The Tetra Tech team communicates with USAID and other US Government (USG) entities through and in collaboration with the COTR. Communication to Tetra Tech from USAID and other USG entities is channeled through our COP. This facilitates collaborative and focused planning that prioritizes and allocates resources consistent with the project mandate and the needs of the USG.

5.2 Work Order Process Flow

WO requests are initiated by USAID through the COTR or A/COTR. The COTR or A/COTR advises the COP of a WO request. There are two types of WOs described in this TO, Administrative Work Orders (WO-A) and Long Term Work Orders (WO-LT). Refer to Figure 5-1 for an illustration of the WO process flow.

5.2.1 Administrative Work Order (WO-A)

A WO-A is a work order typically related to energy, water, wastewater, buildings, or transportation with the anticipated total level of effort (LOE) less than or equal to 18 man days (144 man hours). WO-As include, but are not limited to, conducting site visits, review of plans and designs, logistical support for visits, drafting concepts, presentations, correspondence, and providing technical analysis. The COTR (or A/COTR) requests work under a WO-A to the COP. Atypical requests outside of the five sector disciplines are addressed on a case-by-case basis. Tetra Tech confirms the WO request in writing to the COTR and A/COTR before commencing work as shown in Figure 5-1.

5.2.2 Long Term Work Order (WO-LT)

A WO-LT is a work order related to energy, water, wastewater, vertical structures, or transportation with the anticipated total LOE greater than 18 man days (144 man hours). To implement a WO-LT, the COTR (or A/COTR) submits a WO request to the COP. The WO request includes a brief description of the requirements including the project background, objective, tasks, deliverables, timeframe, proposed LOE and proposed skill sets required.

Upon receipt of the WO request, the COP designates a project Technical Lead. From the WO request, the project Technical Lead prepares a WO proposal collaborating with the USAID Technical Point of Contact (POC). The WO proposal includes the elements of the WO request and/or any modifications proposed by Tetra Tech. The WO proposal also includes staffing and budget projections for expatriate staff, LN staff, sub-contractors, and reach back assistance. Upon review and approval from the COP, the WO proposal is transmitted to the COTR and A/COTR. The COTR (or A/COTR) reviews the WO proposal. Upon written approval of the WO proposal, the WO-LT is assigned a number for tracking purposes and work can commence.

5.3 Additional Scope Requests

If a WO request is received that may be outside the Scope of Work and detailed work requirements as described in Sections C.3 and C.4 of the Task Order, it is reviewed with the CO and COTR so a WO-A, WO-LT or other contract mechanism can be authorized as appropriate.

5.4 Tracking

Per TO, it is the joint responsibility of OIEE and Tetra Tech to track the budget over the course of the project. To aid in tracking, Tetra Tech assigns a number for each WO starting with 0001. WO-A's are numbered WO-A-0001, WO-A-0002, etc. Similarly, WO-LTs are numbered WO-LT-0001, WO-LT-0002, etc. To facilitate the compilation of the LOE for related WOs, letters are added after the WO number (e.g. WO-LT-0001A) when a modification or extension to an existing WO is issued. This facilitates budget and scope tracking at the project (and work order) level without opening an additional work order.

Tetra Tech tracks progress and budget for each WO in a format agreed upon with OIEE and submits updates to the COTR on a weekly basis. An example of the WO tracking sheets are provided in Appendix A (Active and Pending Work Order Status and Completed Work Orders). Additionally, Tetra Tech tracks hours, subcontractor costs, expenses on all WO's and then reports them in the quarterly and annual reports.

5.5 Administrative Work Orders to Promote Capacity Building

Tetra Tech identified the following activities for potential work orders during Year 1 and Year 2. These activities support the mission of the AESP, and are being undertaken as administrative work orders (WO-As) through Year 3.

5.5.1 Afghan First Contractor Capacity Building

Tetra Tech completed the Afghan Contractor Capacity Building Data Collection administrative work order in Year 1 and will continue to help USAID develop the Afghan First program in Year 3 by facilitating a series of IP meetings to discuss the issues identified in the initial research. Further Afghan First program efforts are expected in Year 3.

5.5.2 University Cooperative Education Program

Tetra Tech established a cooperative education program with Kabul University Faculty of Engineering, Kabul Polytechnic and ATVI. Tetra Tech will continue to explore and facilitate cooperative education program each semester for hands on experience and valuable mentoring with engineering staff. The schedule will be coordinated with the universities so the internship does not conflict with the student's academic schedule.

5.5.3 Women in Engineering

Tetra Tech established a gender specific capacity building program where Tetra Tech's female engineering staff visit Kabul University and Kabul Polytechnic and host a series of informal meetings for mentoring the female students to discuss issues in the engineering profession. Tetra Tech professionals have presented examples of A&E plans as well as scheduled field visits to construction sites. For each meeting, a report summarizing the number of attendees and topics discussed is prepared and submitted to OIEE.

Continued efforts will be made during Year 3 to establish mentoring and internship opportunities for female students enrolled in engineering and architecture programs in Universities in Kabul, Afghanistan with Tetra Tech.

5.5.4 Technical Academic Resources

Tetra Tech will continue dialogue with the Deans of the Kabul University Engineering School, Kabul University School of Agriculture, and Kabul Polytechnic to present and individually address USAID and the various COPs at the above noted networking workshops. This provides the universities a venue to present their academic programs and discuss what they can offer in the way of training assistance, testing, and research. Inviting ATVI to address the workshops is also a possibility. This approach will further be evaluated and refined for incorporation into the Year 3 COP workshop plan.

5.5.5 Engineering Field Trips and Demonstrations

Tetra Tech will continue to develop training programs such as field trips to local construction and infrastructure sites to provide real world examples of engineering projects. Examples for potential field trip destinations include roadway construction projects, wastewater treatment or power plants. Year 1 and 2 field trips included the wastewater package plant at Kabul Airport and USACOE Darulaman, Ghazi High School, Sardar Girls School and Kabul University.

Moreover, a construction demonstration program could also be developed collaboratively with ATVI to provide training on construction techniques, construction QA, and methods.

5.6 Long-Term Work Orders to Promote Capacity Building

Tetra Tech will support OIEE on long-term work orders that are aimed at capacity building.

5.7 Completed, Pending and Anticipated Work Orders

Table 5-1 presents an overview of WOs completed to date. More detail on completed WOs is provided in the Quarterly reports submitted on January 26th, 2011, April 19th, 2011, and July 20th, 2011.

Table 5-2 provides a listing of current or pending WOs. Pending work orders include the following:

• Sheberghan Pipeline (WO-LT-0020): The proposed project consists of replacing an existing 320 mm diameter gas transmission pipeline with a new 320 mm gas transmission pipeline. The proposed pipeline will run from the east fenceline at Koja Gogordak gas fields to the Northern Fertilizer Power Plant (NFPP) near Balkh and will be 88.1 kilometers long.

- Judicial Training Center Site Services (WO-LT-0037): Tetra Tech is to provide technical support services for a UXO clearance, topographic survey and geotechnical report of the JTC site in accordance for proposed project.
- Khost-Gardez Highway Investigation (WO-LT-0038): Tetra Tech will provide technical services and perform an independent analysis of the design, and temporary and permanent repairs of the Khost-Gardez Highway failure at marker +23.6 Km for this pending project. Tetra Tech will work closely with LBG/B&V to share necessary resources as required to facilitate the independent investigation
- PTEC NEPS SEPS Interconnection and Capacity Increase (WO-0043) Tetra Tech is to provide technical services for design of electrical transmission (220kV), reactive power compensation and SCADA automation technology improvements for interconnection of the Afghanistan Northeastern Power System (NEPS) with the Uzbekistan power grid.
- Afghan Women's Engineering Internship Program (WO-0042) Tetra Tech will continue to broaden the gender specific capacity building program during Year 3. This work order will provide internship opportunities for female students enrolled in engineering and architecture programs in Universities in Kabul, Afghanistan with Tetra Tech.

Following are the estimated Year 3 projections for WOs in each of the five sectors based on the trend from the completed WOs to date and the remaining LOE on WOs in progress.

MOD 8 approved a budget for Year 3. Work orders are anticipated to be approximately of that budget totaling an estimated

• Energy – 48%

Approximately 6% in Year 2 was in the Energy Sector. This level of effort in energy is expected to grow in Year 3 due to USAID and other donors working in Afghanistan to secure additional electricity supplies through new generation and imports. The focus to improve quality of supply to existing customers and to increase access to electricity for populations currently not yet served will make up a majority of work orders in Year 3.

• Transportation – 15%

In year 3, Tetra Tech will shift its focus from infrastructure to capacity building, technical assistance, and high level support.

• Vertical Structures – 15%

The Vertical Structures sector work not only includes architectural and structural engineering services but also includes site civil design, MEP, and on-site water and sanitation design. This work is expected to decrease in Year 3. Tetra Tech will continue to support the Vertical Structures administrative work orders, drawing reviews and technical support during Year 3.

• Water Resources – 10%

Following the work from Year 2, continued work on dams is expected in Year 3; however, OIEE has not specifically identified projects or indicated the LOE in this sector for Year 3.

- Water and Sanitation 6%
 Although there is no work specific to this particular sector projected for Year 3, most of the water and sanitation related work is projected to be done on vertical structures projects and is included in that forecast.
- Miscellaneous Technical Support 6%
 Under the AESP contract, Tetra Tech is available to provide various technical support services and provide capacity building efforts. Tetra Tech will continue to provide these services in Year 3 including the continuation of the Afghan First Contractor Capacity Building Program. Also during Year 3, Tetra Tech is to provide support to the Requests for Equitable Adjustments (REA) and Claims evaluation and assessment process. The USAID Office of Acquisition and Assistance (OAA) received a substantial number of Claims, Requests for Equitable Adjustment, and Termination Settlement proposals from the Office of Infrastructure, Engineering, and Energy (OIEE) Implementing Partners.

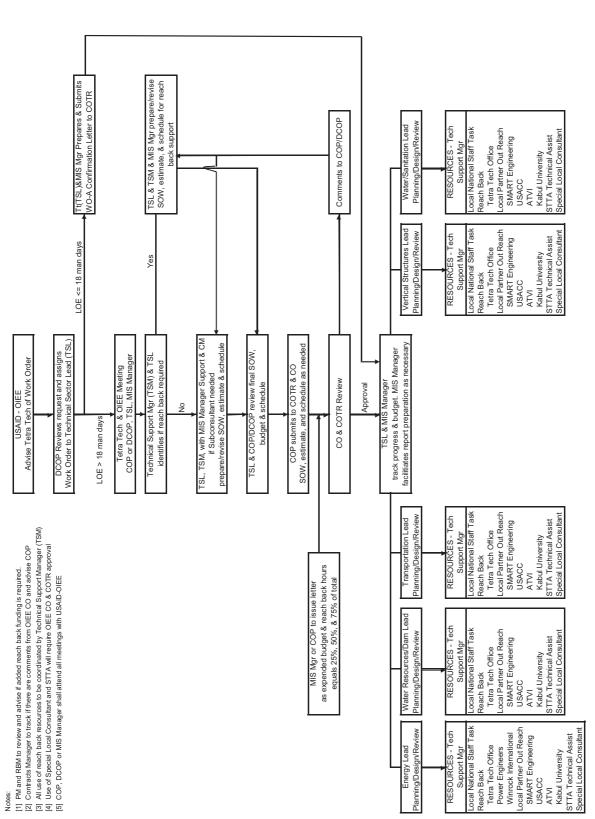


Figure 5-1: Work Order Process Flow Chart

Table 5-1 COMPLETED WORK ORDERS

Afghanistan Engineering Support Program IQC: Task Order 01 - EDH-I-00-08-00027-00 USAID Technical Office: USAID/Office of Infrastructure, Engineering, and Energy (OIEE) Revised November 1, 2011 (Reporting Thru October 23, 2011)

Energy Transportation Technical Services Vertical Structures Water and Sanitation Multi-Disciplinary

	Water Resource							
Work Order	Program	Description	Work Order	Complete Date	Estimated	In Country	Reach Back Cost to	I otal Cost
Number	Туре	Besonption	NTP Date	Complete Bate	Cost (ROM)	Cost to Date	Date	to Date
WO-A-0004	E	GBHS Electrical	1/13/2010	2/15/2010	NA			
WO-A-0007	E	Sardar GHS Electrical	1/16/2010	2/15/2010	NA			
WO-A-0009	E	Integration of Nangarhar into NEPS	1/30/2010	5/11/2010	NA			
WO-A-0011	E	HFO Feasibility for Tarakhil Power Plant	2/3/2010	4/26/2010	NA			
WO-A-0013	F	Third Party MEP Review of IOM 20 Bed Hospital	2/17/2010	3/14/2010	NA			
WO-A-0015	E	MOT Electrical	3/4/2010	0/11/2010	NA			
WO-A-0020	E	SEPS Additional Work	4/1/2010	4/18/2010	NA			
				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
WO-A-0027	E	National Electric Distribution Work Unit Quantity Model Execution Plan for RC-East and Nangarhar Elec Power	4/18/2010	7/10/2010	NA			
WO-A-0038	E	Distribution Program	5/12/2010	10/9/2010	NA			
WO-A-0052	E	NEPS-SEPS Connection Review	8/15/2010	10/9/2010	NA			
WO-A-0053	E	ACEP Report Review	8/18/2010	1/4/2011	NA			
WO-A-0054	E	NLCC 30% Electrical Design Review	8/18/2010	9/6/2010	NA			
WO-A-0057	E	NEPS-Kandahar Construction Plan	9/9/2010	10/9/2010	NA			
WO-A-0046	E	Jalalabad Elec Power Distribution	7/13/2010	2/10/2011	NA			
WO-A-0059	E	Parwan Road Village Electrification	9/13/2010	7/30/2011	NA			
WO-A-0064	E	Sufyane Village Electrification	10/9/2010	7/30/2011	NA			
	_							
WO-LT-0030	E	Sherberghan 200MW Power Plant Feasibility Study	12/23/2010	8/31/2011				
WO-LT-0036	E	Tarakhil PP Operational Evaluation	3/30/2011	8/31/2011				
WO-LT-0031	E	Concept Design for Three 20-kV Lines	12/23/2010	9/28/2011				
WO-LT-0021	E	Selected NEPS Transmission Line Field Investigation	12/23/2010	10/25/2011				
140 4 0007	_		E (4 E (0.0.4.0.	7/11/0010				
WO-A-0037	 	Doshi to Salang Tunnel Pavement Design Review	5/15/2010	7/11/2010	NA			
WO-A-0045	I	Chagcharan Airport Site Visit	6/21/2010	10/19/2010	NA			
MO 4 0047	_	Tablesian Davisou Maissana & Fairabad Aissant	7/04/0040	11/0/0010	NIA.			
WO-A-0047 WO-A-0076	T	Technical Review Maimana & Faizabad Airport Kabul Road Preliminary Costing	7/21/2010 6/2/2011	11/2/2010 6/19/2011	NA NA	-		
WO-A-0076 WO-A-0075	T	Khost-Gardez Highway Failure Investigation	4/27/2011	7/17/2011	NA NA			
WO-A-0075 WO-LT-0008	T	LAMPs for Maimana & Faizabad Airport	5/5/2010	12/13/2010	INA			
WO-A-0010	TS	Review of BS-25 Draft Position	2/2/2010	12/13/2010	NA			
WO-A-0010	TS	Position Advertisements	2/15/2010	3/7/2010	NA NA			
WO-A-0014	TS	Construction Equipment Costs	2/23/2010	2/25/2010	NA			
77 0011	1.0	Data Collection for Afghan Contractors Capacity	L/LO/LOTO	2/20/2010	107			
WO-A-0023	TS	Building	4/11/2010		NA			
WO-A-0040	TS	Power Point Presentation	5/27/2010	6/15/2010	NA			
WO-A-0048	TS	Action Memo SGFDP	7/27/2010	7/31/2010	NA			
WO-A-0050	TS	USAID DVD/CD Filing	8/6/2010	10/13/2010	NA			
WO-A-0065	TS	Pre-Award Survey of Afghan Construction Companies	10/28/2010	11/18/2010	NA			
WO-A-0068	TS	USAID Plan Filing	11/18/2010	3/16/2011	NA			
WO-LT-0039	TS	CHEF Environmental Site Assessment Services	6/2/2011	9/8/2011				
WO-A-0016	VS	AUAF Board of Trustees Support	3/6/2010		NA			
WO-A-0017	VS	Faculty of Education	3/15/2010		NA			
WO-A-0021	VS	MoEW VTC Rehab Drawing Review	4/6/2010	4/20/2010	NA			
WO-A-0022	VS	50 Bed Wmn Hosp Drawing Review	4/6/2010	4/12/2010	NA			
WO-A-0028	VS	IOM 50 BH Samangan Geotech Review	4/18/2010	4/21/2010	NA			
WO-A-0029	VS	CHEF PTTC Drawing Review	4/20/2010	4/29/2010	NA			
WO-A-0030	VS VS	ISD-DGA Proposal Review	4/22/2010	4/28/2010	NA NA			
WO-A-0031 WO-A-0033	VS VS	100 BH IQC Comparison ROM MoPH Complex Structural Design Review	4/28/2010 5/12/2010	5/7/2010 6/8/2010	NA NA			
WO-A-0033 WO-A-0036	VS	AUAF 3D CDR Presentations	5/9/2010	6/12/2010	NA NA			
WO-A-0036 WO-A-0042	VS	AVIPA Processing Plant Review	6/5/2010	0/12/2010	NA NA			
WO-A-0051	VS	MOT Electrical Phase II Drawing Review	8/17/2010	11/15/2010	NA NA			
WO-A-0051	VS	NLCC 90% Design Review	8/28/2010	10/9/2010	NA			
WO-A-0055 WO-A-0062	VS	FOHE Schematic Design Review	9/20/2010	10/17/2010	NA			
WO-LT-0013	VS	Three Towers Project	6/3/2010	12/14/2010	\$			
WO-A-0066	VS	Sardar Roof Design Review	11/6/2010	1/19/2011	NA			
WO-A-0069	VS	Construction Principles Guidelines	11/19/2010	2/10/2011	NA			
WO-A-0070	VS	100% NLCC Design Review	12/2/2010	2/10/2011	NA			
WO-A-0071	VS	PTTC Water Tower Review	12/14/2010	2/10/2011	NA			
WO-A-0073	VS	Roof Framing Design for Sardar Girls High School	1/5/2011	3/12/2011	NA			
WO-A-0074	VS	Insulation Materials Technical Comparison	3/1/2011	3/16/2011	NA			
WO-A-0067	VS	Ghazi Admin Bldg Design Review	11/28/2010	4/18/2011	NA			
WO-A-0002	VS, E, & W/S	Review of AUAF Master Plan Infrastructure	12/28/2009	1/6/2010	NA			
WO-A-0002A	VS, E, & W/S	AUAF Master Plan Rev & SOW/ROM	1/25/2010	2/6/2010	NA			
		Kabul University DFAC and Laundry 35% Design						
					NIA.			
WO-A-0044	VS, E, & W/S	Review	6/16/2010	7/25/2010	NA			
WO-LT-0002	VS, E, & W/S	Review AUAF Concept Design	2/18/2010	8/5/2010				
WO-LT-0002 WO-A-0001	VS, E, & W/S W/S	Review AUAF Concept Design Review Kabul Water Study	2/18/2010 12/28/2009	8/5/2010 1/17/2010	NA			
WO-LT-0002	VS, E, & W/S	Review AUAF Concept Design	2/18/2010	8/5/2010				

Table 5-1 COMPLETED WORK ORDERS

Afghanistan Engineering Support Program IQC: Task Order 01 - EDH-I-00-08-00027-00 USAID Technical Office: USAID/Office of Infrastructure, Engineering, and Energy (OIEE) Revised November 1, 2011 (Reporting Thru October 23, 2011)

Energy Transportation Technical Services Vertical Structures Water and Sanitation Multi-Disciplinary Water Resources

	water hesourc	es					
Work Order Number	Program Type	Description	Work Order NTP Date	Complete Date	Estimated Cost (ROM)	In Country Cost to Date	Total Cost to Date
WO-A-0005	W/S	GBHS Water Supply	1/13/2010	2/22/2010	NA		
WO-A-0006	W/S	Sardar GHS Sanitation	1/16/2010	2/22/2010	NA		
WO-A-0008	W/S	Sardar GHS Water Supply	1/16/2010	2/22/2010	NA		
		MoPH Design Management: Extension of Staff Services					
WO-LT-0004	W/S, E	& Design Reviews	3/17/2010	6/1/2011			
WO-A-0018	WR	Dam #1 Review for Pul-e-Khumri	3/28/2010	5/2/2010	NA		
WO-A-0019	WR	Dam #2 Review for Pul-e-Khumri	3/28/2010	5/2/2010	NA		
WO-A-0025	WR	Kajaki Dam	4/12/2010	6/2/2010	NA		
WO-A-0032	WR	Pul-e-Khumri Cost Estimate	4/29/2010	6/2/2010	NA		
WO-A-0034	WR	Kajaki Dam SOW	5/8/2010	7/6/2010	NA		
WO-A-0039	WR	Kajaki Dam Cost Review	5/18/2010	10/9/2010	NA		
WO-A-0043	WR	Shahtoot and Sarobi II Dam Review	6/16/2010	10/9/2010	NA		
WO-A-0049	WR	Badakshan Bridge Independent Review	8/1/2010	10/19/2010	NA		
WO-A-0061	WR	Bamyan Dam Study	9/19/2010	12/12/2010	NA		
WO-A-0063	WR	Topchi Hydropower Plant Canal Review	10/6/2010	12/12/2010	NA		
WO-LT-0034	WR	Topchi HPP Design Review	2/16/2011	7/7/2011			
		·					

Table 5-2 ACTIVE AND PENDING WORK ORDER STATUS

Afghanistan Engineering Support Program IQC: Task Order 01 - EDH-I-00-08-00027-00
USAID Technical Office: USAID/Office of Infrastructure, Engineering, and Energy (OIEE)
Revised November 1, 2011 (Reporting Thru October 23, 2011)

Energy
Water Resources
Vertical Structures
Transportation
Water and Sanitation
Multi-Disciplinary
USAID Technical Support
Pending Work Orders

	Pending Work Orders								
Program Type	Work Order Number	Description	Work Order NTP Date	Scheduled End Date	Estimated Cost (ROM)	In Country Cost to Date	Reach Back Cost to Date	Total Cost to Date	Total Hours
WO-A: Adm	ninistrative Work Orders	\$							_
TS	WO-A-0024	Afghan First COP Meetings	8/17/2010	12/31/2011					
TS	WO-A-0058	Afghan Standardization	9/20/2010	11/30/2011					
W/S	WO-A-0060	Embassy Biodigestion Study	9/22/2010	9/30/2011					
TS	WO-A-0072	File Transfer Services	12/14/2010	12/31/2011					
TS	WO-A-0077	KHPP Environmental Services	6/18/2011	12/31/2011					
TS	WO-A-0078	Kajaki Unit 2 Assessment	9/12/2011	9/30/2011					
F	WO-A-0079	Tarakhil O&M Estimate	10/27/2011	11/17/2011					
F	WO-A-0080	Gas Pipeline Pre-Feasibility Study	10/27/2011	11/17/2011					
VS	WO-A-0081	K-K Bridge Calculations Review	10/31/2011	11/14/2011					
F	WO-A-0081	SEPS Technical Services	10/31/2011	11/20/2011					
		SEFS Technical Services	10/31/2011	11/20/2011					
WO-LT: Lor	ng Term Work Orders	Desired and Description							
VS	WO-LT-0001	Regional and Provincial Training Centers Concept and Final Design	1/5/2010	11/1/0011					
VS	WO-L1-0001	Centers Concept and Final Design	1/3/2010	11/1/2011					
W/S, E	WO-LT-0005	GBHS Utility Construction Documents	3/17/2010	4/28/2011					
, ,		,							
W/S, E	WO-LT-0006	SGHS Utility Construction Documents	3/17/2010	8/1/2011					
_		QA Oversight SPR - Southern & Eastern							
T	WO-LT-0007	Afghanistan	6/7/2010	12/31/2011					
1	WO-LT-0009	PRT Field Support PRT Field Support - Khost Bridge Final	8/6/2010	4/30/2012					
т	WO-LT-0009 AMD 1	Design	8/6/2010	2/29/2012					
	WO E1 0000 7 WID 1	PRT Field Support - Bamyan Dam Sites	Task 1,2,3	E/E0/E01E					
Т	WO-LT-0009 AMD 2	Pre-Feasibility Studies	5/17/2011	12/30/2011					
		Matun and Lakan Crossings Conceptual							
T	WO-LT-0009 AMD 4	Bridge Designs	4/19/2011	11/30/2011					
E	WO-LT-0012	PK to Chimtala Transmission Line	6/10/2010	8/18/2011					
VS	WO-LT-0014	VTC Green Design	8/2/2011	9/30/2011					
VS	WO-LT-0015	Kabul University Men's Dormitory Construction Inspection and DFAC Design Review	7/25/2010	11/24/2011					
		Power Reliability Study (US Embassy,							
E	WO-LT-0022	USAID)	12/23/2010	6/30/2012					
		Afghanistan Electrical Transmission &							
E	WO-LT-0023	Generation Study	12/23/2010	10/19/2011					
E	WO-LT-0024	Kud Bergh (Mazar) 48MW Power Plant Field Investigation	12/23/2010	7/30/2011					
F	WO-LT-0024 WO-LT-0025	RC-East Villages Electrification	11/25/2010	11/19/2011	-				
		Maimana and Faizabad Airport 3rd Party	11/20/2010	11/10/2011					
Т	WO-LT-0029	QA	11/12/2010	11/15/2011					
TS	WO-LT-0033 AMD 1	USAID/OAA Claims Assistance	1/31/2011	TBD					
TS	WO-LT-0033 AMD 2	USAID/OAA Claims Assistance	9/7/2011	TBD					
TS	WO-LT-0033 AMD 3	USAID/OAA Claims Assistance	9/7/2011	TBD					
		Afghanistan Electricity Sector Economic	LIMITED						
E	WO-LT-0035	Study	5/19/2011	TBD					
Т	WO-LT-0041	MoTCA - Regional Airport Support	7/6/2011	12/31/2011					
TS	WO-LT-0042	Afghan Women Internship Program	9/16/2011	TBD					
				Task 1 -					
			9/23/2011	10/23/11					
<u>E</u>	WO-LT-0044	Bamyan Valley T & D Design	(Task 1)	Task 2 - TBD					
т	WO LT 0040	Evaluation of MoPW Capacity to	10/20/2011	12/20/2011					
	WO-LT-0049	Conduct Roadway O&M	10/29/2011	12/20/2011					
Pending Wo	ork Orders								
		Ghazni 100-Bed Hospital Environmental							
TS	WO-LT-0040	Site Assessment Services PTEC - EA		TBD	-				
E	WO-LT-0043	Power Transmission, Expansion and Connectivity		TBD					
TS	WO-LT-0045	Darunta Technical Services		TBD					
E	WO-LT-0046	Kajaki Technical Services		TBD					
E	WO-LT-0048	PTEC SOW Preparation		TBD					
E	WO-LT-0050	Kajaki Unit 2 Technical Review		TBD					
	WO-LT-0051	NEPS-SEPS Connection Assessment		TBD					

6.0 Reporting and Deliverables

Tetra Tech provides accurate and timely reporting to USAID as specified in the TO and summarized below.

6.1 Work Plan

This document serves as the required work plan for the entire TO. It is intended to be a 'living document' that will be reviewed and modified as the AESP develops. Note that this revision updates the prior revision of October 11th, 2010. The work plan includes items such as arrival dates, work activities, and long- and medium-term postings. It also includes a description of the Tetra Tech management structure, work flow, and overall program approach. The yearly work plan will become part of the TO.

6.2 Operational Security Plan

The Operational Security Plan (SOP) provides information on the personnel and physical security for TO. The Operational Security Plan was submitted for review and approval by the COTR under separate cover on December 12th, 2009. Every six months the SOP is updated and refined as local conditions change and as the project's security needs require refinement.

6.3 Performance Monitoring Plan

In accordance with the TO, a Performance Monitoring Plan (PMP) was submitted to and approved by the COTR within 90 days of the Contract award. The PMP establishes performance indicators to measure the program's progress and accomplishments. The submittal of the PMP will depend on a timely approval of the PMP preparer by USAID.

6.4 Weekly Meetings

The Tetra Tech team holds weekly meetings with the COTR to discuss the AESP progress and resolve problems as required. Tetra Tech COP and COTR will continue to communicate through email, cell phone and meetings outside the weekly meetings to support project progression.

6.5 Quarterly Progress Reports

Quarterly progress reports are submitted 10 days after the end of the reporting period. Submission of this report follows the USG reporting schedule, which begins October 1st. A fourth quarter report is not required as that information is submitted in the annual report as noted in Section 6.7. Thus, reports are to be submitted on or before January 10th, April 10th, and July 10th of each year. To date, Tetra Tech has submitted quarterly reports on February 23rd, 2010; May 6th, 2010 and July 21st, 2010 for activities in Year 1; January 26th, 2011, April 19th, 2011 and July 20th, 2011.

The quarterly reports summarize the progress of major activities during the period of performance, indicates if problems were encountered, and proposes remedial actions as appropriate. The quarterly reports also include status updates for the WOs including the total hours utilized to date by individual WO and overall TO.

The Tetra Tech COP will notify the CO and the COTR of problems, delays, or adverse conditions, which materially impair the team's ability to meet the requirements of the TO.

6.6 Reach Back Hours

USAID will be notified when 25%, 50%, and 75% of the authorized total of reach back hours have been expended. There are a total of man days authorized under the Task Order. In Year 3, we anticipate utilization of man days.

6.7 Annual Work Plans

Annual work plans will be prepared that detail the work to be accomplished during the upcoming year. The 3rd year, 4th year and 5th year work plans will be finalized 60 days prior to the end of the preceding year according to the USG reporting schedule. Accordingly, the annual work plans will be submitted during the month of August. These annual work plans may be revised, as needed, to reflect changes on the ground and with the concurrence of the COTR.

6.8 Annual Report

An annual report of each fiscal year will be submitted 30 days after the end of the fiscal year on September 30th. Thus, annual reports will be submitted on or before October 30th each year. The report will combine the activities of the four quarters and provide an assessment of the progress in achieving the annual objectives set forth in the annual work plans.

6.9 Final Project Report

At the end of the contract, Tetra Tech will prepare a final project report. The final report will be drafted to allow for incremental improvements in the process, both generally within USAID and specifically with respect to this TO. The final report will contain the following information:

- Specific objectives of the program;
- Activities undertaken to achieve program objectives;
- Results achieved by objective, including life-of-program reporting according to the Performance Monitoring Plan;
- Cost of efforts by sector;
- Actions taken to leverage resources and to ensure the continuation and sustainability of program objectives and the effectiveness of these actions;
- Recommendations regarding unfinished work and/or program continuation; and
- Lessons learned over the course of the program and recommendations for other related programs.

6.10 Other

The Tetra Tech team prepares periodic success stories and other outreach materials that can be utilized by Tetra Tech and USAID as appropriate. Tetra Tech staff may shadow the OIEE local staff as determined appropriate.





ACTIVE AND PENDING WORK ORDER STATUS

Afghanistan Engineering Support Program IQC: Task Order 01 - EDH-I-00-08-00027-00

USAID Technical Office: USAID/Office of Infrastructure, Engineering, and Energy (OIEE)

Revised November 31, 2011 (Reporting Thru October 23, 2011) (Local National, USACC, SMART and Power time through October 23, 2011)

Program Scheduled End Estimated In Country Reach Back Total Cost to Assigned Technical Tetra Tech Work Order Work Order Approved AMD Pending Approved Work Order Numbe Description Notes and Outstanding Items Status⁽⁴⁾ Total Hours POC Issue Date NTP Date AMD AMD. Cost (ROM) Cost to Date⁽⁵⁾ Cost to Date⁽⁵⁾ Type⁽³⁾ WO-A: Administrative Work Orders TT submitted tentative agenda to COTR on 5/3/11. COP list provided to COTR on Afghan First COP Meetings WO-A-0024 6/11/11. Tentative meeting in November. 4/6/2010 8/17/2010 12/31/2011 WO-A-0058 Afghan Standardization Work ongoing. Open 8/19/2010 9/20/2010 11/30/2011 WO-A-0060 Embassy Biodigestion Study Awaiting US Embassy contact information 9/6/2010 9/22/2010 9/30/2011 WO-A-0072 12/12/2010 12/14/2010 12/31/2011 File Transfer Services Work ongoing WO-A-0077 (HPP Environmental Services TT awaiting documentation from the diesel generator manufacturer 6/15/2011 6/18/2011 12/31/2011 Open WO-A-0078 Kajaki Unit 2 Assessmen TT submitted final report on 10/8/11. Awaiting USAID comments Open 9/10/2011 9/12/2011 9/30/2011 WO-A-0079 Tarakhil O&M Estimate Work ongoing Open 10/26/2011 10/27/2011 11/17/2011 WO-A-0080 Gas Pipeline Pre-Feasibility Study Work ongoing. 10/26/2011 10/27/2011 11/17/2011 NO-A-008 K-K Bridge Calculations Review Work ongoing Open 10/27/2011 10/31/2011 11/14/2011 SEPS Technical Services 10/31/2011 WO-A-0082 Work ongoing 10/30/2011 11/20/2011 WO-LT: Long Term Work Orders Regional and Provincial Training Centers WO-LT-0001 oncept and Final Design AMD 6 work ongoing. 12/14/2009 1/5/2010 10/27/2011 1,2,3,4,6 11/1/2011 W/S, E WO-LT-0005 GBHS Utility Construction Documents 4/28/2011 AMD 9 cancelled 2/15/2010 3/17/2010 11/28/2010 Open 6,7,8 Submitted final Addendum 2 - Revision 1 Plans and Specifications 8/2/11. Remaining tasks include Amendment #5 - Construction Administration Services for Site Layout, Grading and Utilities. Awaiting utilities award contract.
Final review of Bridge 2 is ongoing. Scheduled completion by 11/5/11. SPR matrix SGHS Utility Construction Documents 2/15/2010 3/17/2010 7/17/2011 1,2,3,4,5,6 8/1/2011 WO-LT-0006 Open QA Oversight SPR - Southern & Eastern submitted 10/16/11. Report #12 and G-G Road report submitted at meeting on WO-LT-0007 Afghanistan Open 2/23/2010 6/7/2010 5/9/2011 12/31/2011 WO-LT-0009 PRT Field Support 3/22/2010 8/6/2010 6/8/2011 Rev 3 Rev 1 4/30/2012 WO-LT-0009 AMD 1 PRT Field Support - Khost Bridge Final Design Final design submitted to USAID on 10/11/11. Awaiting USAID comments.

Kalu concept design submitted 10/3/11. Awaiting USAID comments. Shikari Task 3 Open 3/22/2010 8/6/2010 4/23/2011 Rev 2,3 2/29/2012 PRT Field Support - Bamyan Dam Sites Prework ongoing. TT submitted REV 4 for Shikari Tasks 4-6 on 10/29/11. USAID approv Rev 3 WO-LT-0009 AMD 2 Feasibility Studies Open 3/22/2010 5/17/2011 06/30/2011 Rev 4 12/30/2011 Matun and Lakan Crossings Conceptual Bridge WO-LT-0009 AMD 4 ridge study submitted 4/30/11. Awaiting USAID decision. 4/19/2011 11/30/2011 Designs Siemens studies ongoing; TT submitted report on 9/24/11. Awaiting USAID comm Meeting with MoEW held on 9/26/11. TT submitted SOW and ROM for AMD 1 on WO-LT-0012 PK to Chimtala Transmission Line 4/13/2010 6/10/2010 6/19/2011 8/18/2011 10/15/11. USAID comments received 10/19/11. TT submitted draft SOW and ROM and is awaiting USAID direction. WO-LT-0014 VTC Green Design 5/17/2010 8/2/2011 9/24/2011 9/30/2011 Kabul University Men's Dormitory Construction QC work ongoing.

Meters installed 7/2/11. Meter testing ongoing. TT to submit preliminary report on Inspection and DFAC Design Review WO-LT-0015 7/25/2010 11/24/2011 6/1/2010 7/27/2011 1.2.3 WO-LT-0022 wer Reliability Study (US Embassy, USAID) 11/5/11 9/30/2010 12/23/2010 5/11/2011 6/30/2012 Afghanistan Electrical Transmission & Data collection/analysis underway. TT submitted report on 10/19/11. Awaiting USAID comments. TT submitted PSS/E models on 10/29/11. WO-LT-0023 Generation Study 9/30/2010 12/23/2010 6/23/2011 10/19/2011 Kud Bergh (Mazar) 48MW Power Plant Field Revised Report submitted 7/24/11. Received request from USAID to include 250-350 WO-LT-0024 MW options. Final Report submitted to USAID 9/11/11. Awaiting USAID response. 12/23/2010 Open 11/16/2010 7/30/2011 WO-LT-0025 RC-East Villages Electrification 9/29/2010 11/25/2010 7/27/2011 1, 2 11/19/2011 Work ongoing. IUSAID/TT team trip to Maimana 10/27 to 10/31. TT staff providing QA oversight at WO-LT-0029 Maimana and Faizabad Airport 3rd Party QA Maimana and Faizabad. Reports are pending. 10/14/2010 11/12/2010 9/8/2011 1,2 11/15/2011 Revised AMD 001 approved. Met with USAID to discuss problems with documents WO-LT-0033 AMD 1 USAID/OAA Claims Assistance eceived. TT to provide list of documents with issues or problems 12/18/2010 1/31/2011 9/8/2011 , Revised TBD WO-LT-0033 AMD 2 AMD 002 approved. Pending review 9/7/2011 USAID/OAA Claims Assistance Open 9/7/2011 9/7/2011 TBD REV 2 WO-LT-0033 AMD 3 USAID/OAA Claims Assistance Revised AMD 003 approved. Settlements for #16, 24, 27, and 34 pending review. 9/7/2011 9/7/2011 10/13/2011 TBD Open Draft report submitted on 8/29/11. Final report submitted on 10/3/11. Awaiting USAID LIMITED Afghanistan Electricity Sector Economic Study 2/12/2011 5/19/2011 WO-LT-0035 TBD TT met with PIU on 10/18, 10/19, 10/22, 10/29. Meeting to be held 10/31/11. Expect MoTCA - Regional Airport Support eports for review by 10/31/11. 7/6/2011 12/31/2011 WO-LT-0041 7/3/2011 WO-LT-0042 Afghan Women Internship Program Task 1 work ongoing. Meeting held with USAID 10/31/11 and Universities 10/29/11 Open 6/21/2011 9/16/2011 9/23/2011 Bamyan Valley T & D Design
Evaluation of MoPW Capacity to Conduct WO-LT-0044 Report submitted 10/23/11. Awaiting USAID comments 8/20/2011 (Task 1) 10/23/11 WO-LT-0049 Roadway O&M TT to schedule meeting with USAID. 10/20/2011 10/29/2011 12/20/2011 Open Pending Work Orders Ghazni 100-Bed Hospital Environmental Site Assessment Services
PTEC - EA WO-LT-0040 5/25/2011 TBD TT requires USAID direction prior to preparing SOW and ROM. Pending TT submitted SOW and ROM on 10/9/11. USAID comments received 10/11/11. TT Power Transmission, Expansion and WO-LT-0043 submitted revised SOW and ROM on 10/16/11. USAID approval required 7/27/2011 Scoping site visit completed 9/6 to 9/8/11. TT submitted revised SOW and ROM on WO-LT-0045 Darunta Technical Services 10/29/11. USAID approval required. 8/20/2011 TBD Scoping site visit completed 9/26/11. TT submitted REV 3 SOW and ROM on WO-LT-0046 Kajaki Technical Services 9/7/2011 10/20/11. On hold per 10/25/11 emai Pending

ACTIVE AND PENDING WORK ORDER STATUS

Afghanistan Engineering Support Program
IQC: Task Order 01 - EDH-I-00-08-00027-00
USAID Technical Office: USAID/Office of Infrastructure, Engineering, and Energy (OIEE)
Revised November 31, 2011 (Reporting Thru October 23, 2011) (Local National, USACC, SMART and Power time through October 23, 2011)

Program Type ⁽³⁾	Work Order Number	Description	Notes and Outstanding Items	Assigned By	Technical POC	Tetra Tech Lead	Status ⁽⁴⁾	Work Order Issue Date	Work Order NTP Date	Approved AMD Date	Pending AMD	Approved AMD	Scheduled End Date		Reach Back Cost to Date ⁽⁵⁾	Total Hours
E	WO-LT-0048	PTEC SOW Preparation	TT preparing SOW and ROM.				Pending	10/13/2011					TBD	TBD		
E	WO-LT-0050	Kajaki Unit 2 Technical Review	TT preparing SOW and ROM.				Pending	10/25/2011					TBD	TBD		
E	WO-LT-0051	NEPS-SEPS Connection Assessment	TT preparing SOW and ROM.				Pending	10/29/2011					TBD	TBD		
(2) Work Or (3) Program (4) Status:	ders that are planned to	or Complete	Structures (VS), Water/Sanitation (W/S) or Water Resources (WR)												RED-AWAITING BLUE-AWAITIN	

Energy
Water Resources
Vertical Structures
Transportation
Water and Sanitation
Multi-Disciplinary
USAID Technical Support
New Work Orders in October 2011
Pending Work Orders

USAID/Afghanistan
U.S. Embassy Cafe Compound

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